

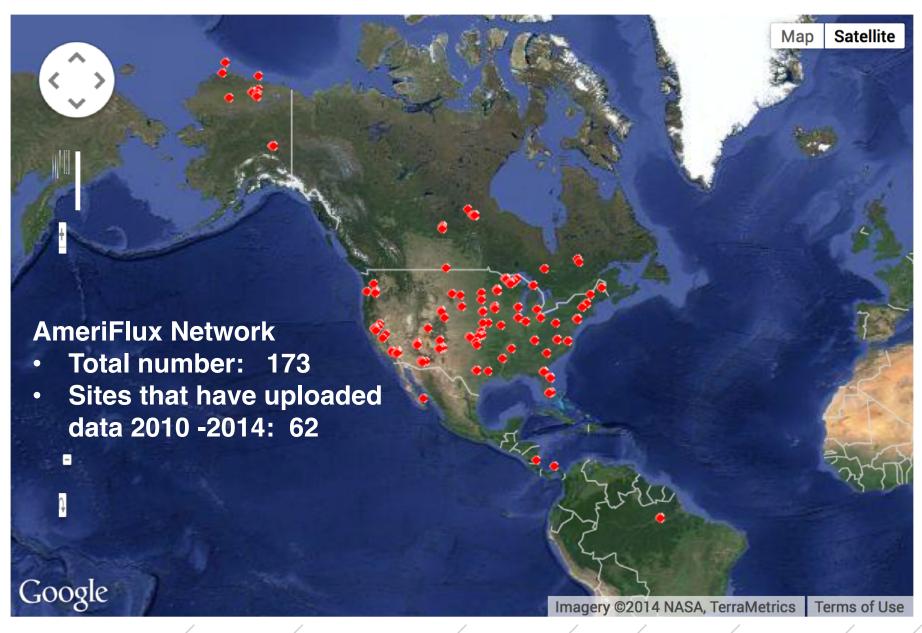
The AmeriFlux Management Project

Welcome to Data Workshop

February 12, 2014 Berkeley, California







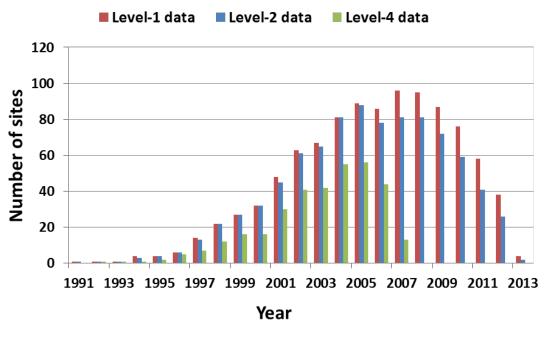






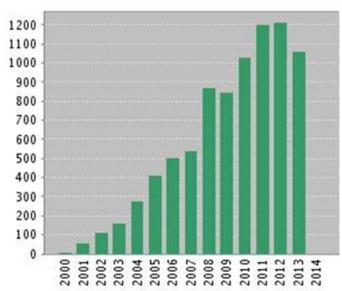


AmeriFlux Data Submission



AmeriFlux Data Use

Citations "AmeriFlux"



AmeriFlux Management Project

Measurement QA/QC and Technical Support	Data Processing and QA/QC
Biraud, Billesbach, Chan, Hanson, Law	Agarwal, Papale, Pastorello, Boden (CDIAC)
Core Site Support	Annual Meeting and Outreach
Torn, Biraud, Agarwal, Saarni	Torn, Baldocchi, Saarni, Science Steering Committee
	eriflux Other swork Stakeholde

ESD14-004



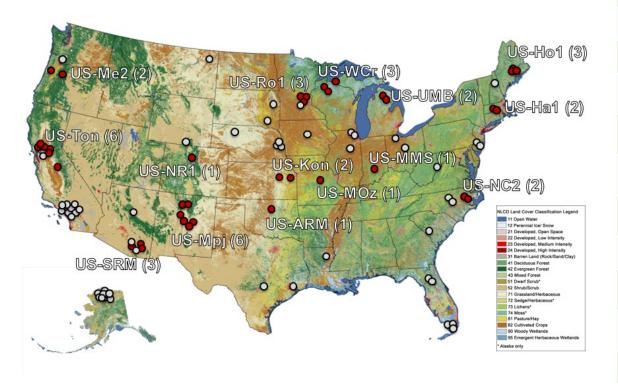






AmeriFlux Network – Map of US sites 13 core clusters with 41 tower sites

AmeriFlux Core sitesAmeriFlux sites



Name of Cluster	Number of Sites
ChEAS	4
Harvard Forest	2
Howland Forest	3
Morgan Monroe State Forest	1
New Mexico Elevation Gradient	6
Niwot Ridge	1
N. Carolina Loblolly- Alligator River	3
Tonzi/Vaira/Delta	5
UMBS	3
Walnut Gulch/Santa Rita	5
Konza Prairie	3
Metolius	2
Rosemount*	3









QA/QC Tech Team



From left to right:

- S. Biraud (LBNL)
- D. Billesbach (UNL)
- S. Chan (LBNL)
- C. Hanson (OSU)

GOAL: maintain high-quality, comparability, and continuity of observations, and support innovation.

Provide technical support and QA/QC resources to participating sites:

- Gold file comparison
- Ensure inter-comparability by PECs to sites for comparisons
- Provide PAR & CO₂ standards to all sites
- Loaner program to Core Site network
- · Technical support as requested

Addition to existing QA/QC Tech capabilities:

- FY14: CH₄ intercomparison and calibration standards
- FY15: Sub-canopy storage intercomparison
- Foster innovation

QA/QC Tech: Recent activities

- Benchmarked OSU and LBNL PECs
- Flux intercomparison at eight sites
- Provided 12 sites with calibrated PAR sensors
- Provided six sites with CO₂ standards
- Loaned equipment to 5 Core Site clusters

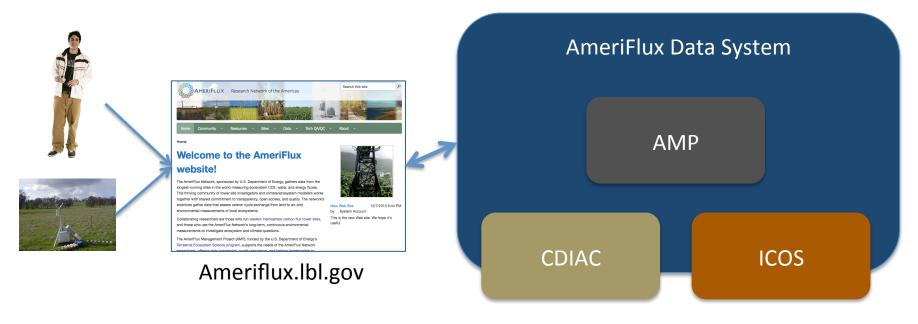




Site visited	PI	Dates of Visit
Sherman Island, CA	D. Baldocchi	April 5-18, 2013
Kansas Field Station, KS	N. Brunsell	May 1-13, 2013
Konza Prairie, KS	N. Brunsell	May 3-14, 2013
Willow Creek, WI	A. Desai	June 18-25, 2013
Rosemount, MN	T. Griffis	June 27 - July 5, 2013
Niwot Ridge	P. Blanken	July 26 - August 4, 2013
Ozarks, MI	L. Gu	August 28 – September 9, 2013
Sillas Little, NJ	K. Clark	September 17-28, 2013

AmeriFlux Data System















What's New in the Network

- 14 new and returning sites joined the AmeriFlux network, including seven from Canada and one from Mexico.
- Creation of 13 Core Site-Clusters (41 towers total) for long term records, representing more than 40% of all active AmeriFlux sites.
- New, Rapid Response Flux System available to AmeriFlux sites for special research opportunities (thanks to DOE program managers!).
 Managed by the AmeriFlux Management Project (AMP).
- AMP is running updated "Level 4" code: consistent, gap-filled, GPP/ Reco-partitioned data streams will be available for synthesis studies
- Tech QA/QC visited eight AmeriFlux sites and has new gas standard and temperature calibration facilities.





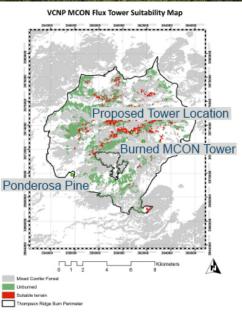




AmeriFlux Rapid Response Flux System

- Full eddy covariance (CO₂) and micromet system
- Loan up to three years.
- Take advantage of special opportunities
- First deployment: unburned site in Valles Caldera to <u>pair</u> with burned site.













Valles Caldera *Mixed Conifer forest (US-Vcm)* AmeriFlux site:

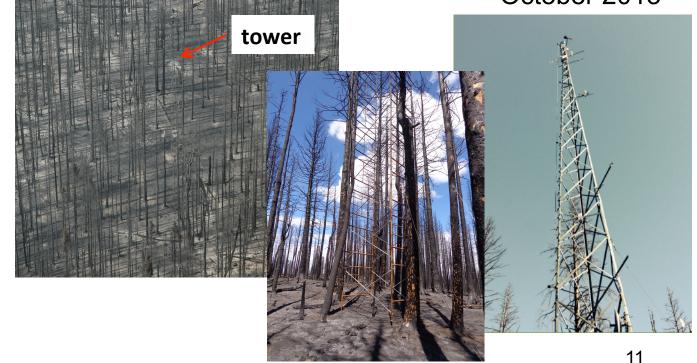
hit by a stand-replacing fire in June 2013



AMP provided replacement instruments and sensors.

The newly instrumented tower was functional as of October 2013

Thompson Ridge Fire burned 24,000 acres in the Valles Caldera National Preserve



Photos: Marcy Litvak



Upcoming Events

- AmeriFlux Annual PI/Community Meeting, May 4-5, 2014 (Sunday night – Monday night) Bolger Center, Potomac MD (DC area)
 - Meeting Chairs: Peter Curtis, Dave Hollinger
 - The DOE Terrestrial Ecosystem Science Program (TES) PI meeting is May 6-7 in same location.
- 2. 7th Annual Summer Course in Flux Modeling and Advanced Measurements. Niwot Ridge, CO. http://www.fluxcourse.org/course.html









AmeriFlux Management Project Team

Project Leads Margaret Torn, LBNL

Dennis Baldocchi, UCB



Data Systems, QA/QC



Technical QA/QC

Sébastien Biraud, LBNL Dave Billesbach, UNL Chad Hanson, Oregon State Stephen Chan, LBNL



Deb Agarwal, LBNL Dario Papale, ICOS Italy Marty Humphrey, U Virginia Tom Boden, ORNL, CDIAC Boris Faybishenko, LBNL Gilberto Pastorello, LBNL Catharine van Ingen, LBNL Biju Jacob, LBNL Jessica Voytek, LBNL Norm Beekwilder, U Virginia





Project Coordinator Marilyn Saarni, LBNL









